

Urban Operations in the Year 2020

Study Report

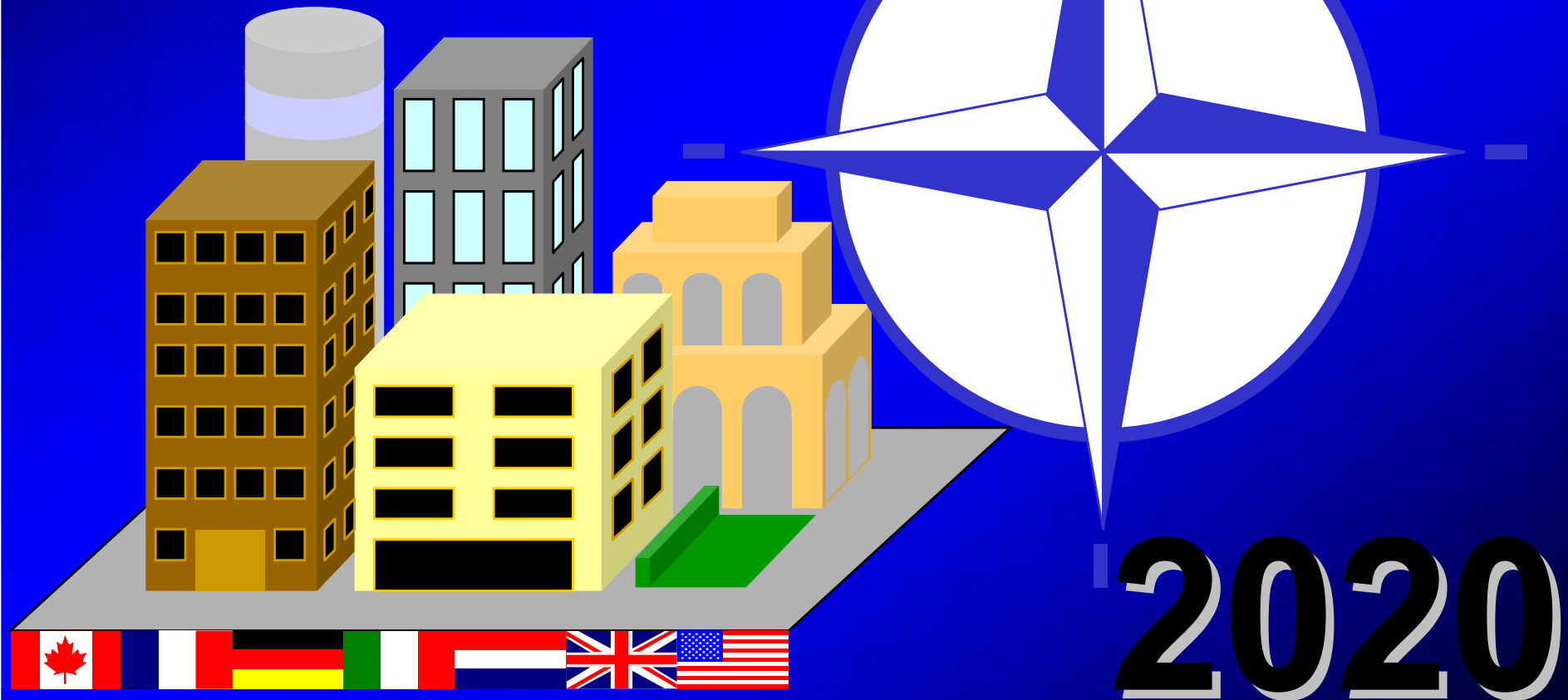


IMPORTANT NOTICE

**DETAILED EXPLANATION
NOTES ARE ATTACHED TO
EACH SLIDE**

Urban Operations in the Year 2020

Study Report



No! – I haven't got time to see any crazy salesman ...





Study Director

*Colonel Philip Baxter, UK Army
Directorate of Land Warfare, UK MOD*

Participating Nations

CA, FR, GE, IT, NL, UK, US



- Background
- Process
 - Operational Framework
 - Operational Concepts
 - Capability Requirements
 - Possible Solutions
- Conclusions
- Recommendations

Reasons for the Study

- NATO equipment and structures optimised for conventional warfighting within Alliance boundaries
- Military concepts and doctrine do not adequately address urban issues
- Asymmetric threat, emerging key technologies and urban operations are major drivers and challenges for future Alliance operations



Study Aim

To develop a conceptual framework that will support missions in urban terrain at the operational level of command in the year 2020

Study Deliverables

- Study Report
- Briefing to SAS Panel, CNAD and MC

Study Duration - Jun 00 to Jun 02



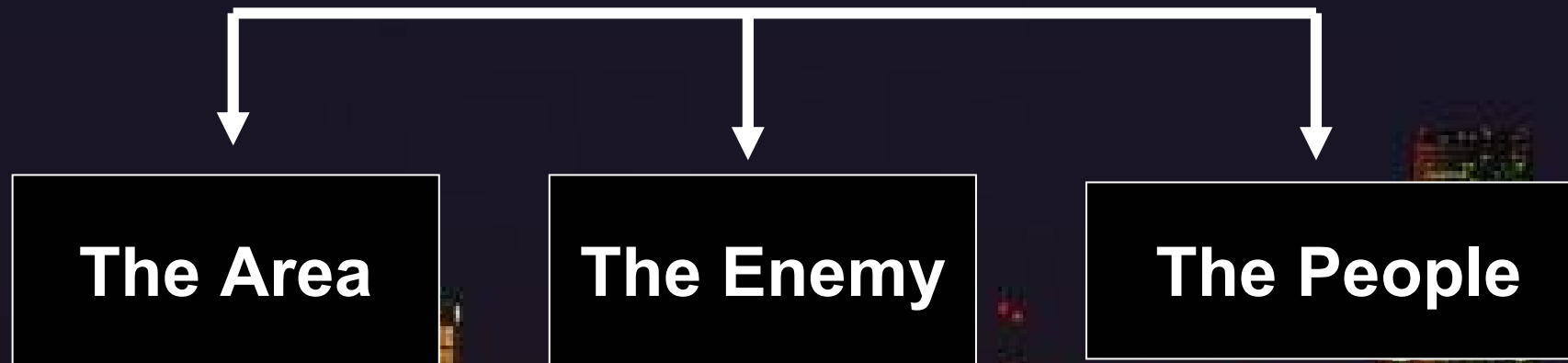


- Examined the Future Operating Environment
- Established an operational approach
- Identified likely missions and operational concepts
- Completed a capability survey
- Conducted a Capability Assessment (CAPS)
- Conducted an Urban Seminar Wargame (USW)
- Refined conclusions and recommendations
- Completed Report



- Growth in urban population
- Globalisation
- Urban terrain will dominate future operations
- Asymmetric opposition
- Growth in media
- Society will demand that wars/operations be conducted differently
- Societal trends will guide which technologies provide the means

WHY OPERATE IN URBAN AREAS?



NATURE OF URBAN AREAS



Inter-relationship of the three elements



Opposing Philosophies

Attrition Versus Manoeuvrist

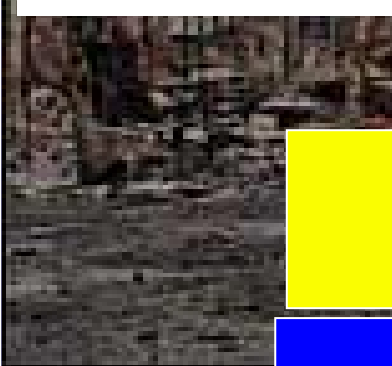
■ Attrition

- High casualties
- Significant damage
- Destruction of infrastructure



■ Manoeuvrist

- Effects based
- Reduced casualties (own, non-combatant, enemy)
- Reduced collateral damage



**A “Groznyesque” solution
is no longer acceptable!**

A “NEW” approach is required



UNDERSTAND

SHAPE

ENGAGE

CONSOLIDATE

TRANSITION



Understand

- Intelligence/information collection operations, which provides friendly forces with an understanding of the urban battlespace
 - Indigenous population
 - Factions, sympathies, capabilities, intelligence sources
 - Enemy forces
 - Friendly forces
 - Structure of urban area
 - Physical
 - Infrastructure/services
 - Ethnic/cultural/political



Shape

- **Actions taken by friendly forces that set the conditions for continued operations and friendly forces success. The intent is to restrict enemy freedom of manoeuvre and action.**
 - **Involves isolating enemy**
 - **Control an urban battlespace**
 - **Control or support non-combatants**



Engage

- **Deliberate actions taken by friendly forces directed against NODES in order to achieve the desired effects.**
 - Focus on precision effects
 - Attack physical and moral planes
 - Use of both lethal and non-lethal means



Consolidate

- **Those Actions Designed to Secure and Establish Control**
 - Protecting what has been gained
 - Repositioning
 - Providing for post conflict sustainment and recovery



Transition

- **Transfer control to local civilian authorities or an international organization**
 - **Restore infrastructure and services**
 - **Restore control to civil authorities**

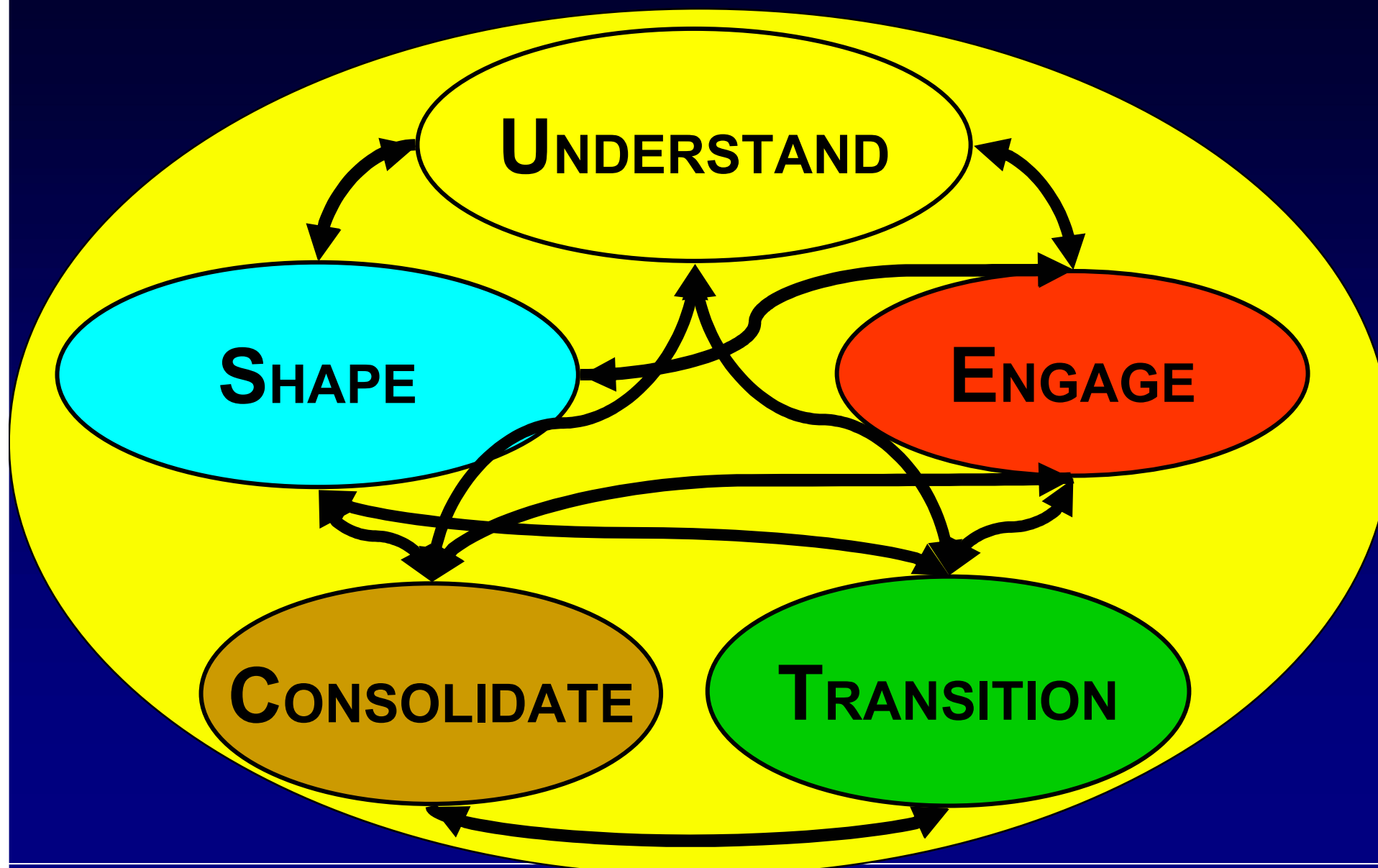


u s E c t



U s e c t







MISSION TYPES

- **Objective is the urban area itself:**
 - Capture an urban area
 - Defend an urban area
 - Isolate/neutralize an urban area
- **Objective is within urban terrain**
 - Capture or destroy an enemy force
 - Focused offence (facility, port, individual)
 - Focused defence
- **Objective is to protect or assist people**
 - Neutralize combatants
 - Humanitarian assistance
 - CIMIC



CONCEPTS

TRADITIONAL

EMERGING

Isolation

Siege



Nodal
Isolation

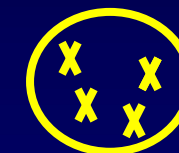


Remote Strike

Destruction



Precision Strike



Ground
Assault

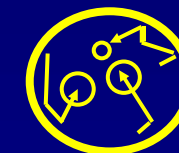
Frontal



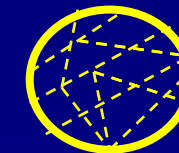
Nodal Capture
and Expansion



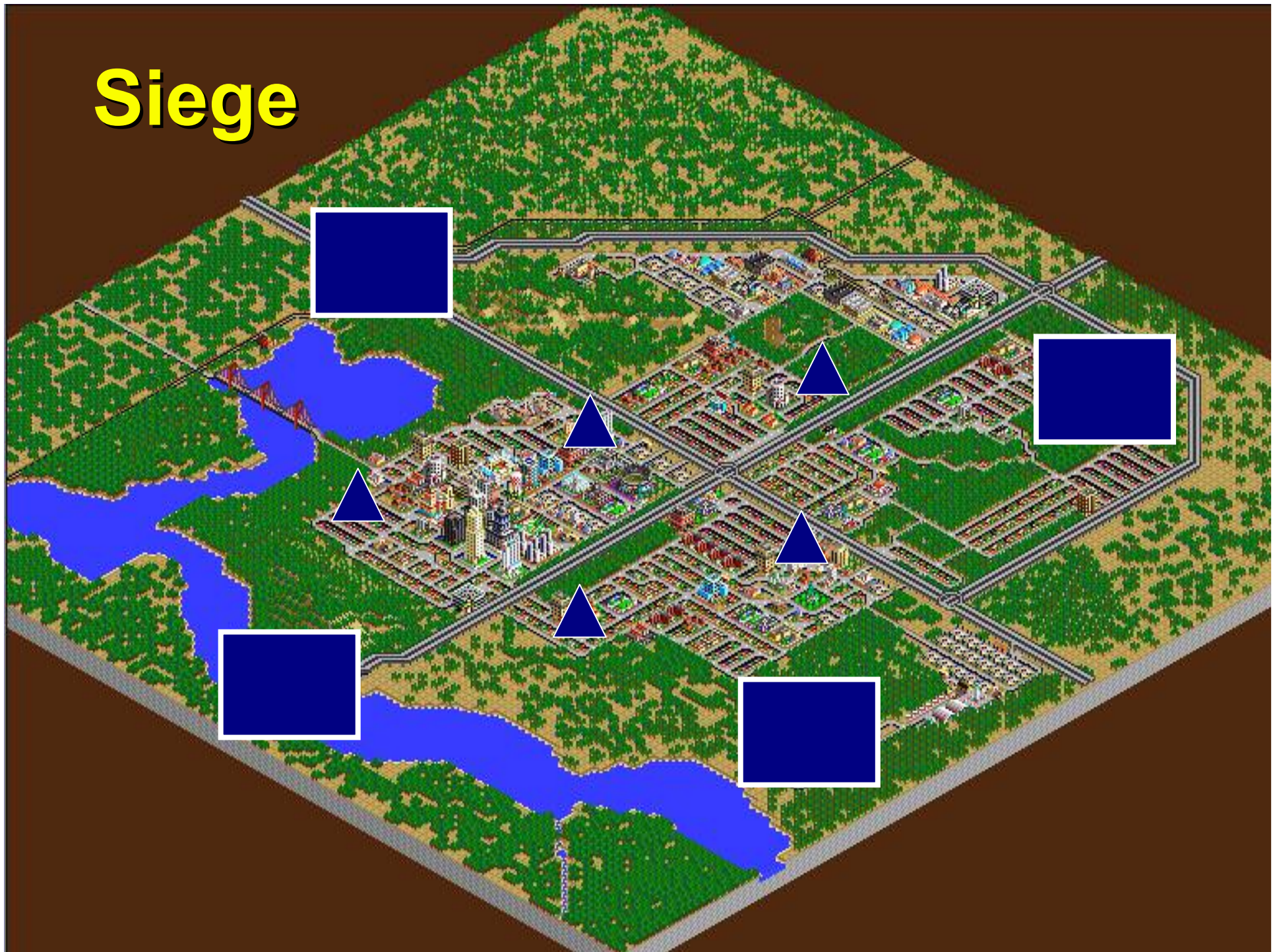
Soft-point Capture &
Expansion



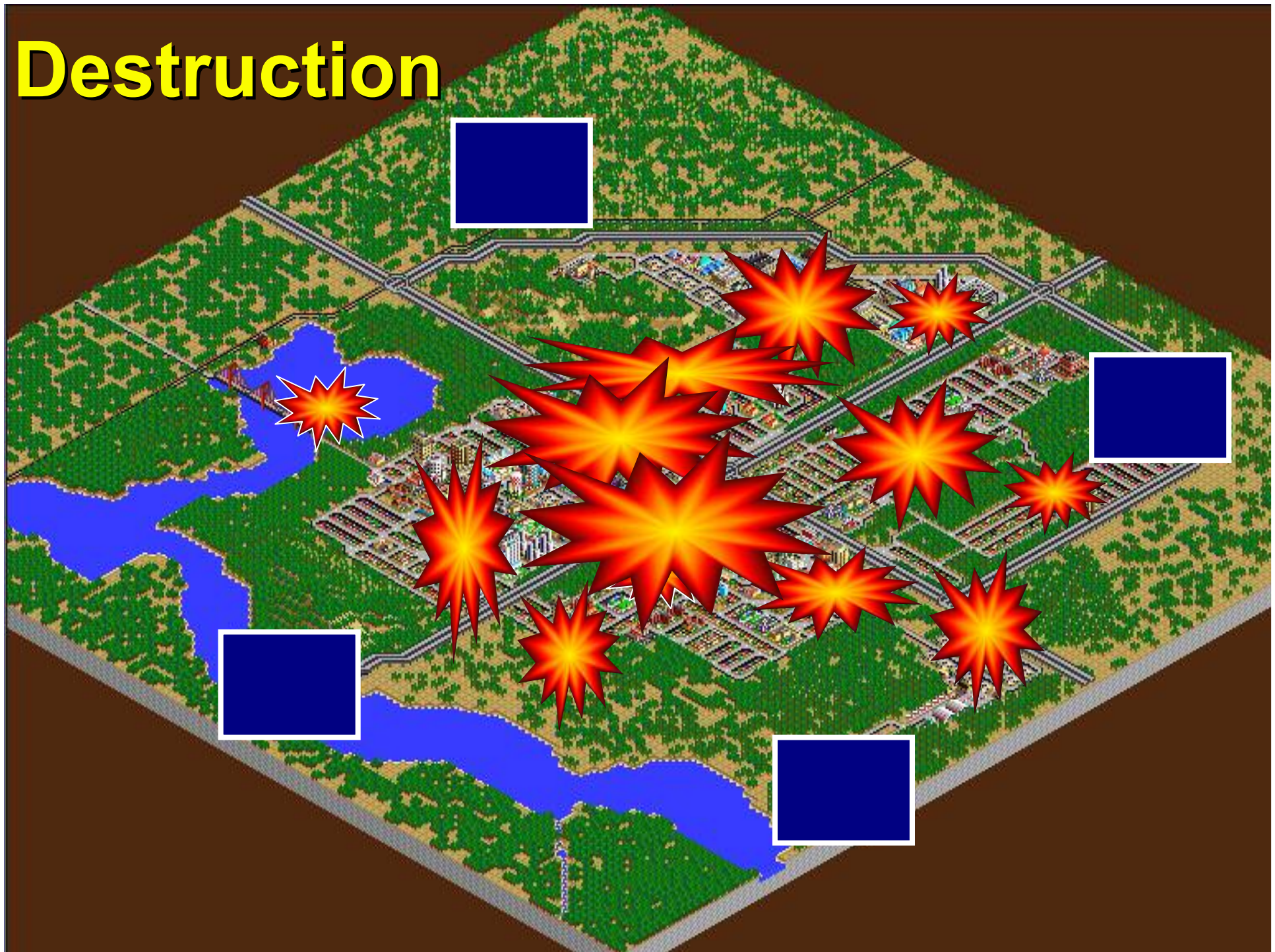
Segment and
Capture/Isolate



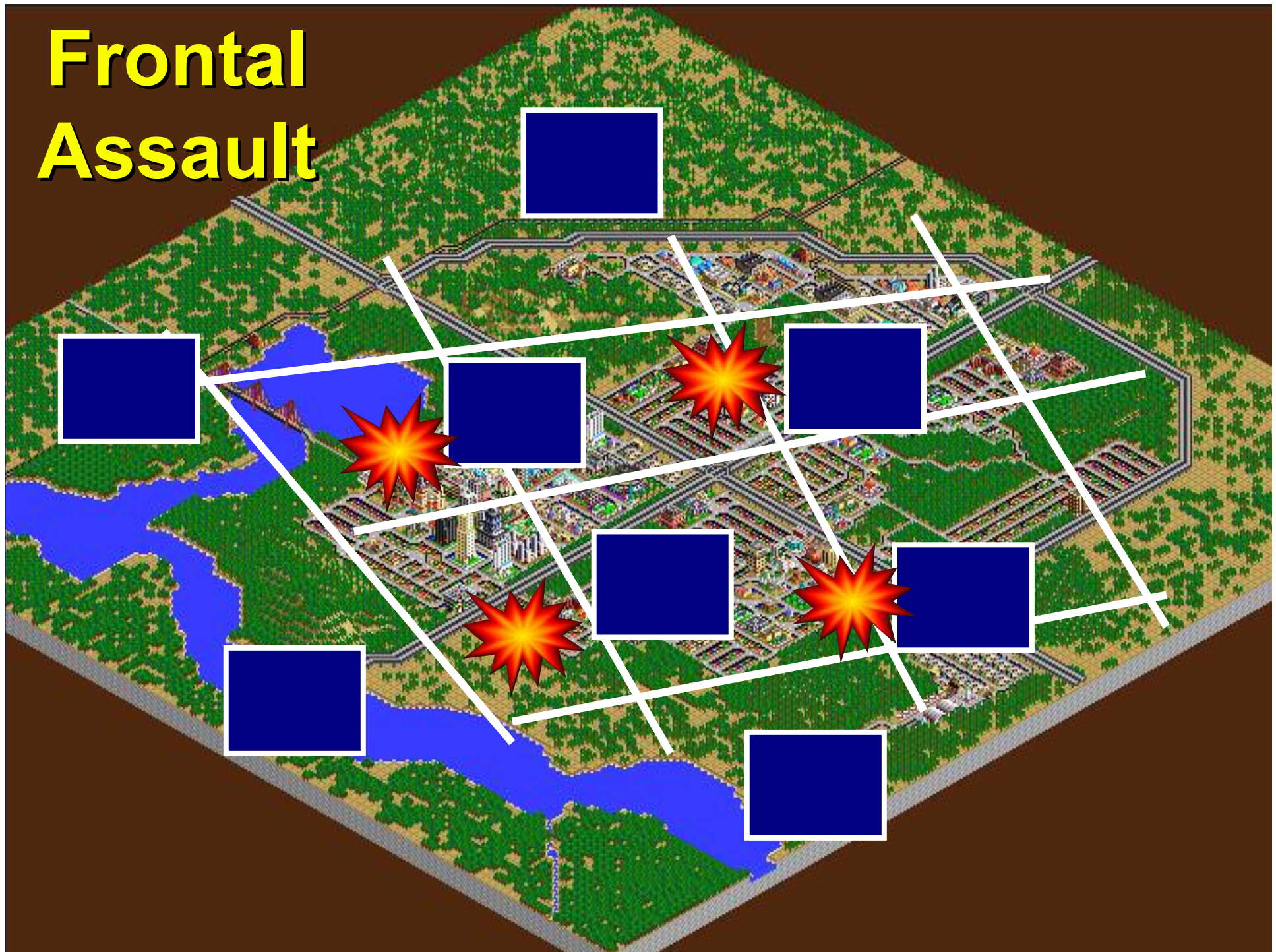
Siege



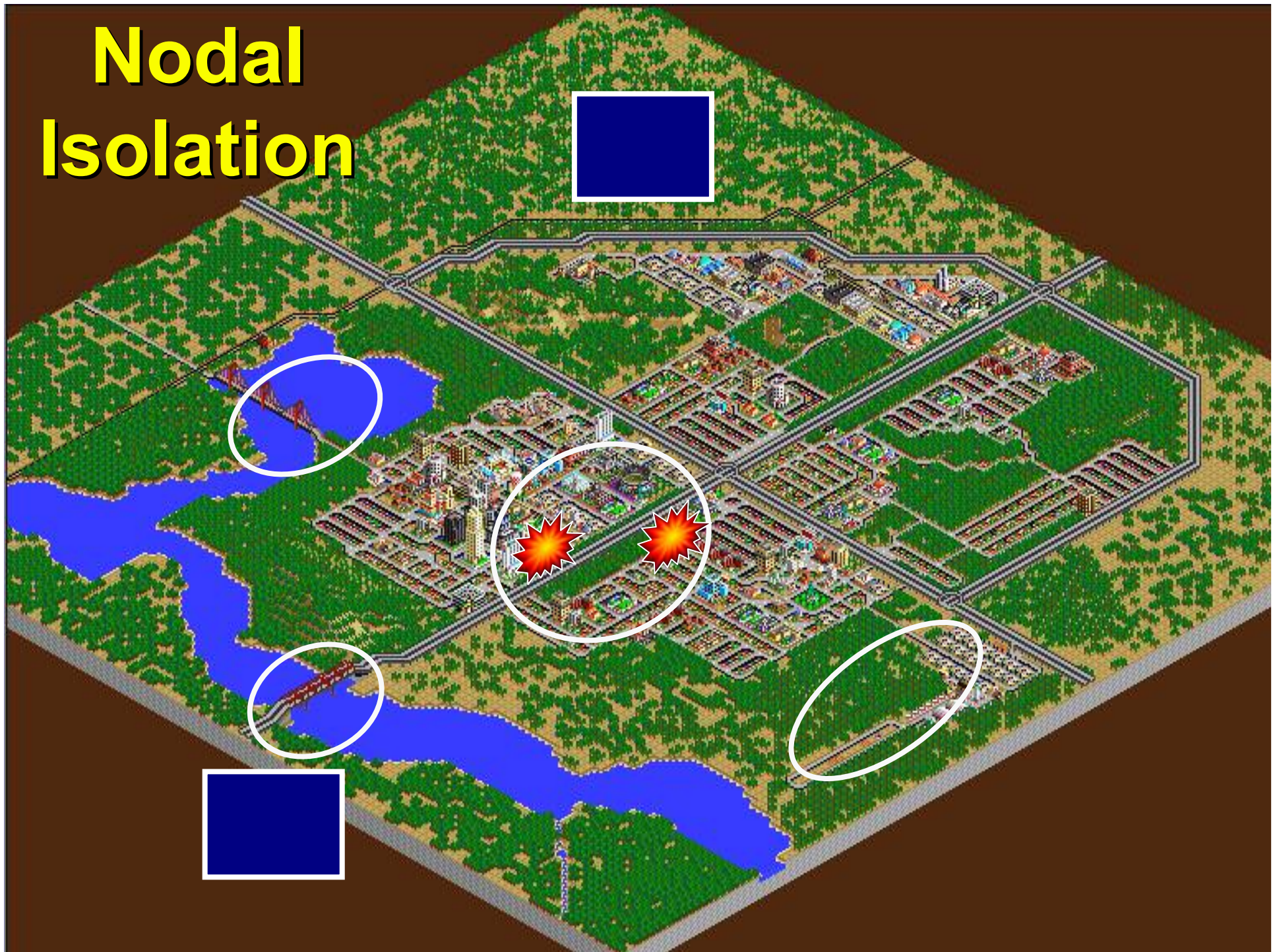
Destruction



Frontal Assault



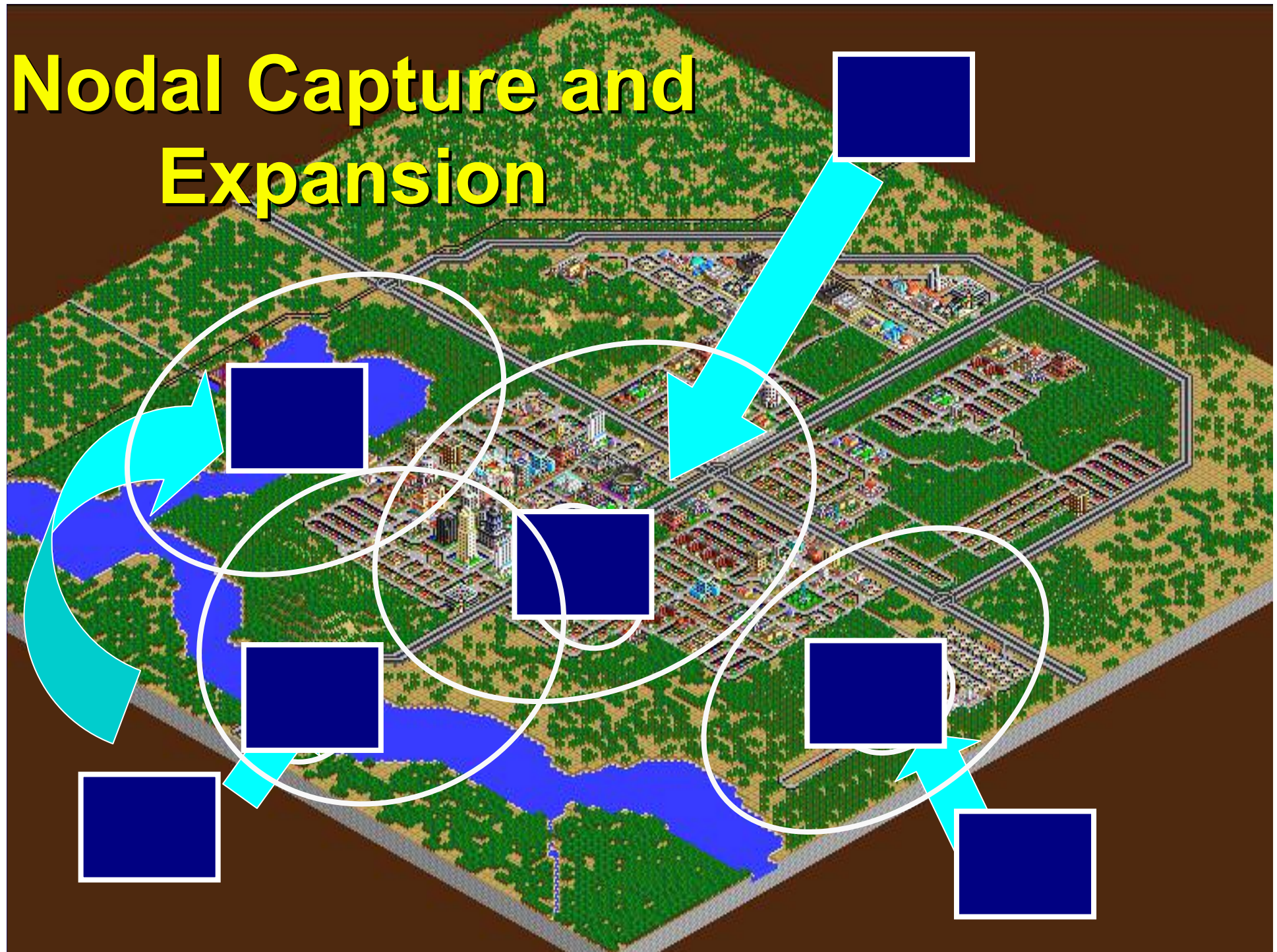
Nodal Isolation



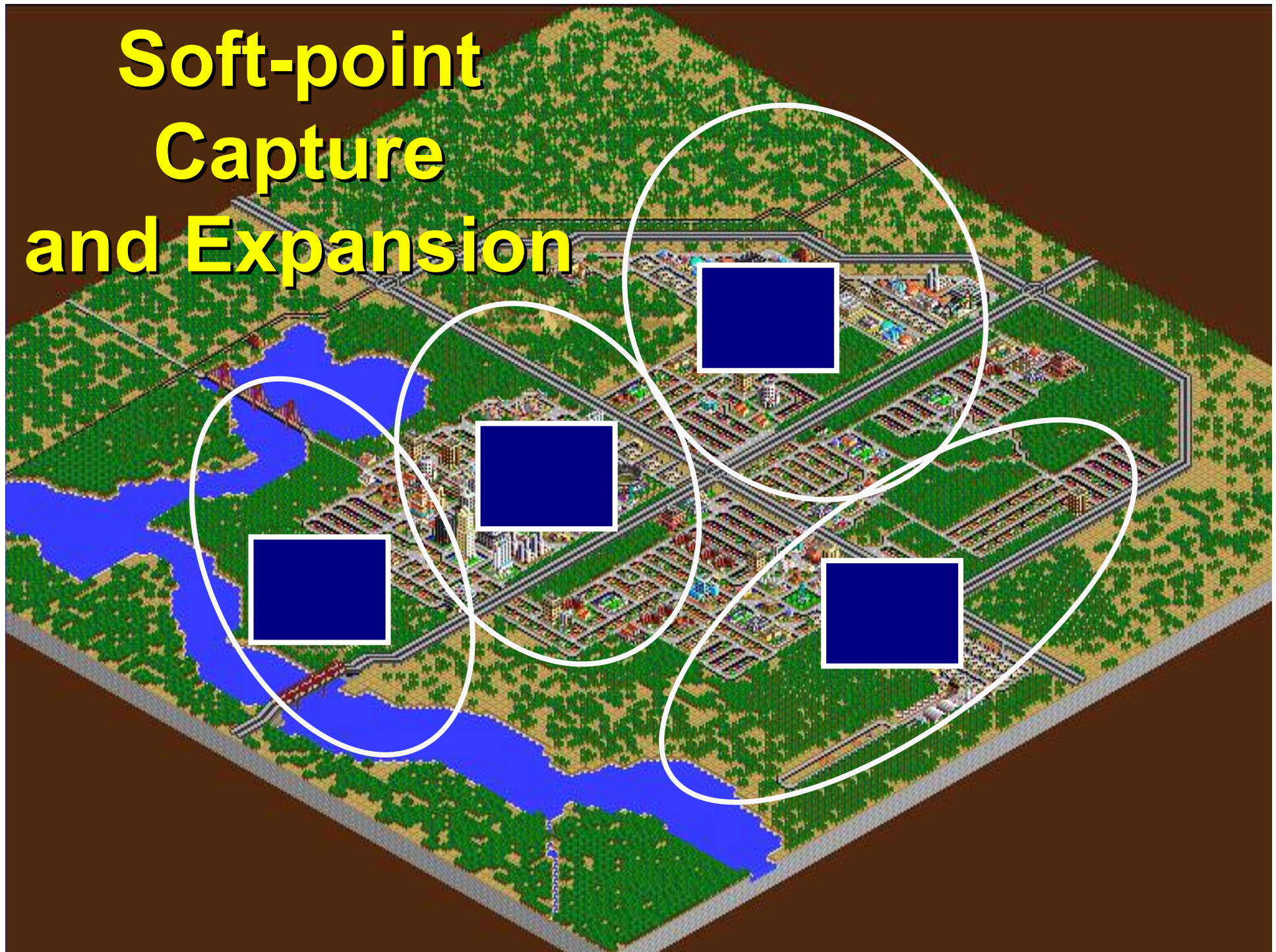
Precision Strike



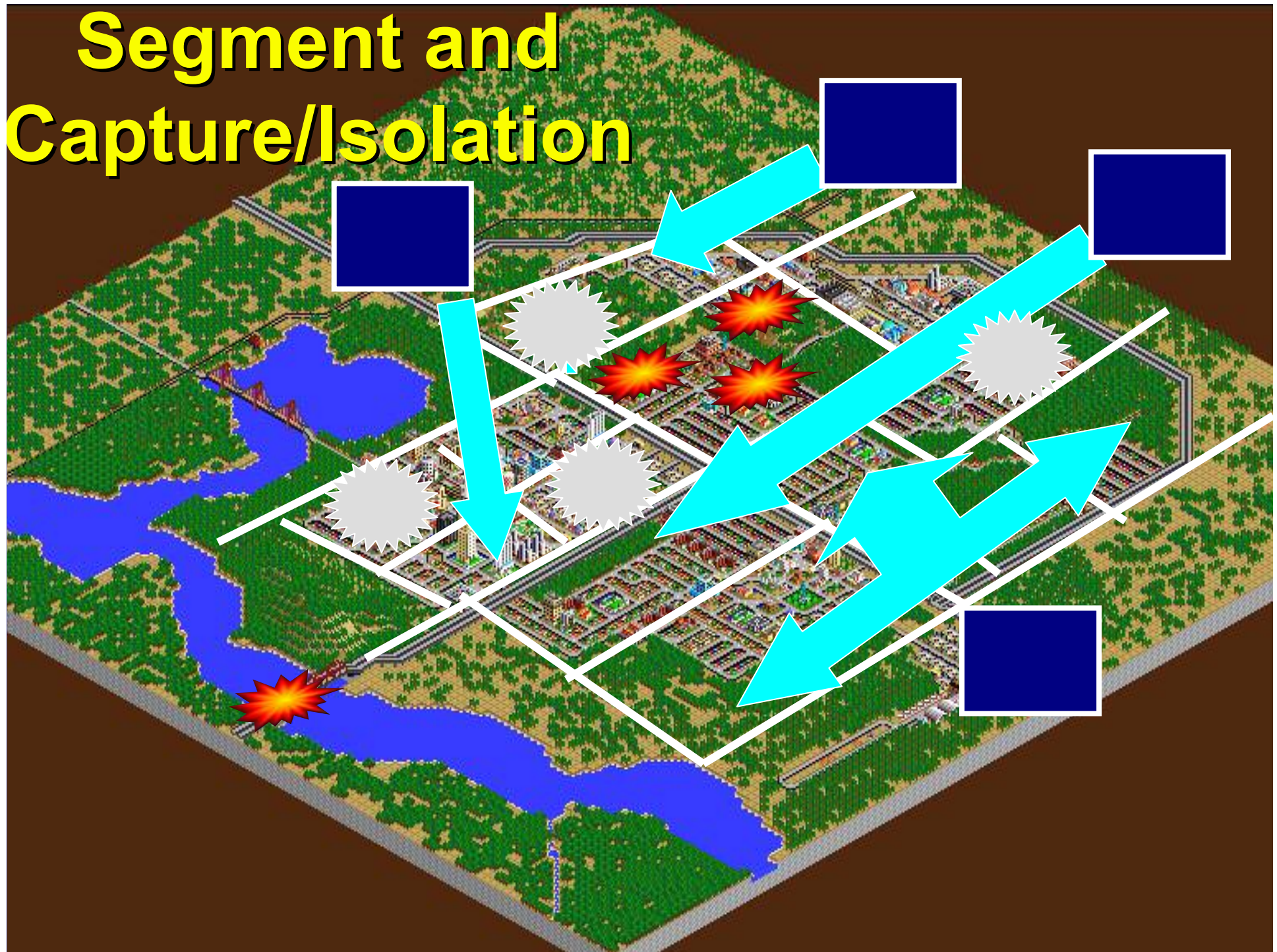
Nodal Capture and Expansion



Soft-point Capture and Expansion

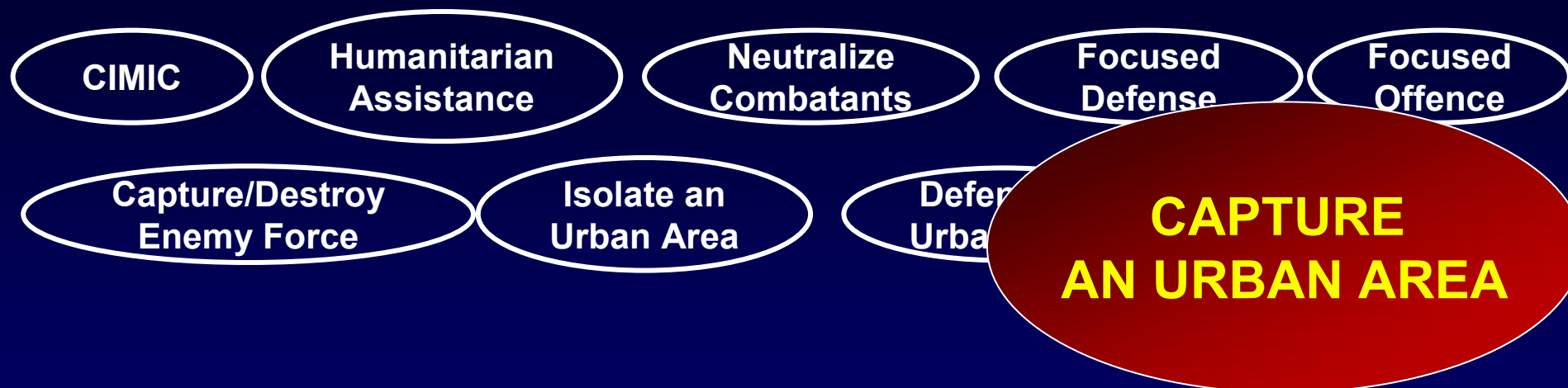


Segment and Capture/Isolation

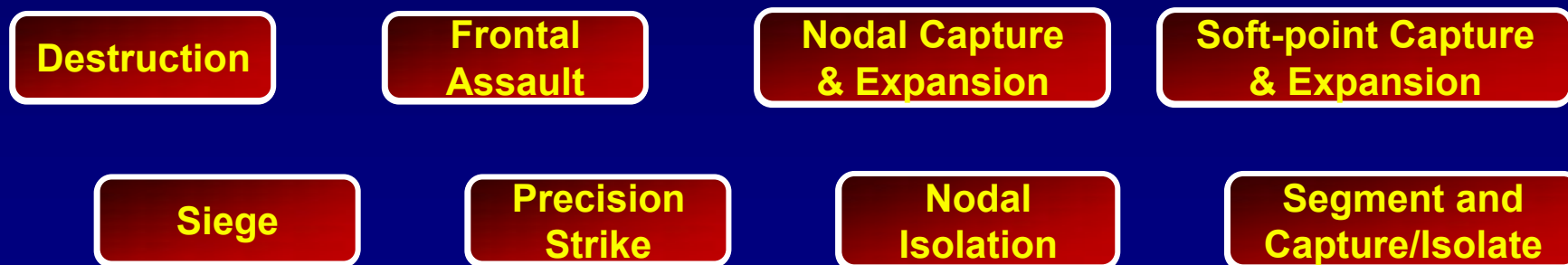




Missions



Operational Concepts





Process: Capability Requirements

32

Destruction

Destroy wide area targets

Isolate the city

Supply isolate forces in the city

Evacuate isolated wounded in the city Influence local population

Influence local population

Command forces

Locate Red forces

Discern Red movement/log/intent

Fire Support

Frontal Assault

Destroy point targets

Isolate the city

Secure "front line"

Resupply "front line"

Fire Support

~~Clear building~~

Command forces

Hide Blue movement and location

Locate Red forces

Discern Red movement/log/intent

Precision Strike

Destroy point targets

Isolate the city

Locate Red forces

Discern Red movement/
log/intent

Locate NODES

53
Capability
requirements

Capability Assessment

The main purpose of CAPS

- **Collect and discuss national inputs on:**
 - capability requirements
 - system concepts (materiel)
 - non-materiel solutions
- **Rank the capability requirements and system concepts (materiel)**
- **Deliver input for the follow-on USW activities**



Results from CAPS

- Merged the original 53 capabilities to 42
- Identified 15 Capabilities as key
- Materiel:
 - Mapped 79 system concepts against 42 capabilities
 - Merged 79 system concepts into 36 and ranked them
 - Selected 12 candidates for USW
- Non-Materiel:
 - Identified potential solutions for 42 capabilities



Top 15 Capability Requirements

- U • Have an overall understanding of the global and local situation**
- U • Acquire an accurate understanding of urban battlespace**
- U • Determine intent, aim, location, movement, status of opposing forces**
- U • Process, format and distribute large scale data**



Top 15 Capability Requirements

- S** • Assure C4 interoperability
- S** • Deny enemy having effective C4ISTAR
- S** • Establish, secure and maintain own forces support system
- S** • Enable a force to use the urban battlespace
- S** • Provide the appropriate level of mobility
- S** • Detect, identify and assess rapidly NBC threats



Top 15 Capability Requirements

- E** • Provide and sustain combat power and maintain tempo
- E** • Destroy or neutralize fixed and mobile targets
- E** • Establish a reliable Friend-Foe-Civilian Identification
- E** • Conduct cyber operations
- E** • Dominate the EM spectrum



Process: Determining Solutions

38

	D	O	T	M	L	P	F	
Capability	✓			✓				
Capability	✓	✓			✓		✓	
Capability			✓		✓			
Capability				✓		✓		
Capability	✓				✓			

Urban Seminar Wargame

- **Aim**
 - Identify benefits of 12 system concepts from CAPS
 - Identify those system concepts that offer the best prospects for research programmes
 - Confirm/identify the key DOTM drivers
- **Scope**
 - Focus at operational level
 - Force structure NATO / Coalition joint operations
 - Using the USECT conceptual framework
 - Focus on Materiel but include all views on DOTM

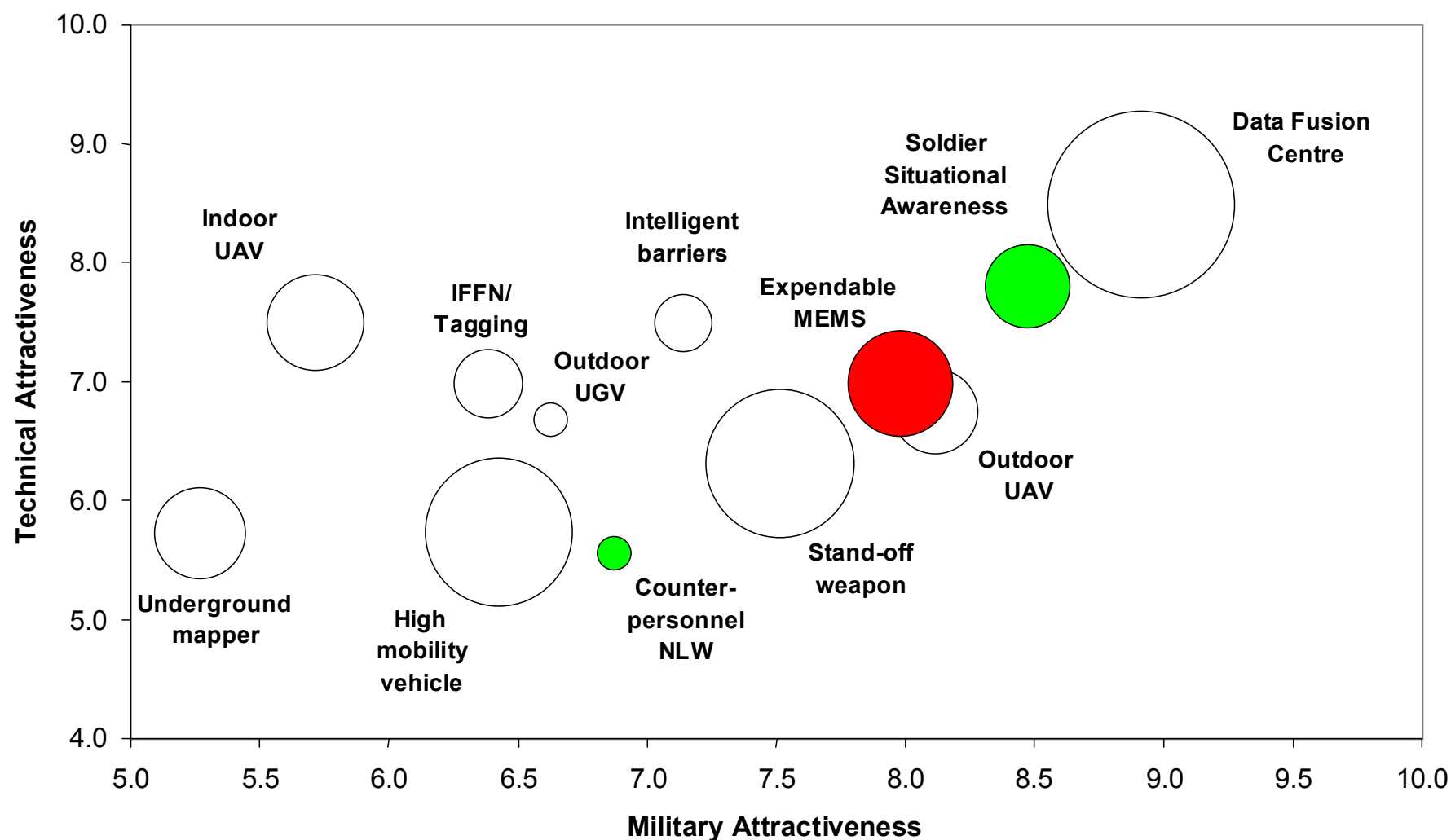
Method

- A structured process to elicit expert opinions of the participants
- 3 Vignettes:
 - Crisis Response Operation (CRO), defend a city (warfighting), attack a city (warfighting)
- 4 syndicates and observers:
 - 2 blue (NATO), 1 red (opponents), 1 white (non combatants & media)
- Plenary discussions
- Delphi technique to promote debate and to capture views of all participants



Results

- Ranking of materiel solutions
- DOTM capability drivers



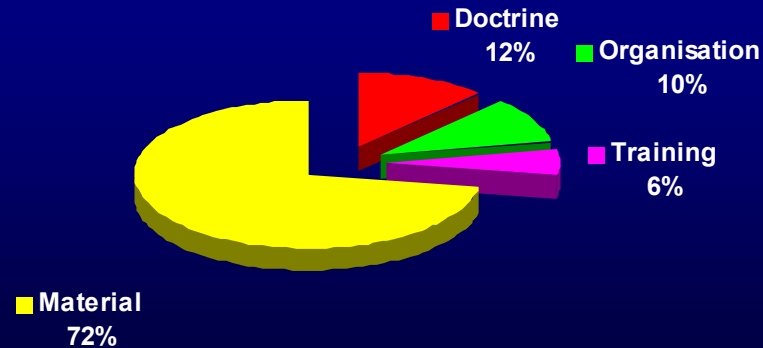


Examples of DOT solutions

- D** • 3D-battlespace co-ordination doctrine for urban operations
- D** • CSS Doctrine for Urban Operations
- O** • HUMINT units
- O** • Armoured, readily available and air-transportable supply services
- T** • Train with a focus on the region of operation, i.e. political, ethnic, religious, cultural, social aspects, history and national language
- T** • Joint training for urban operations



Key 15



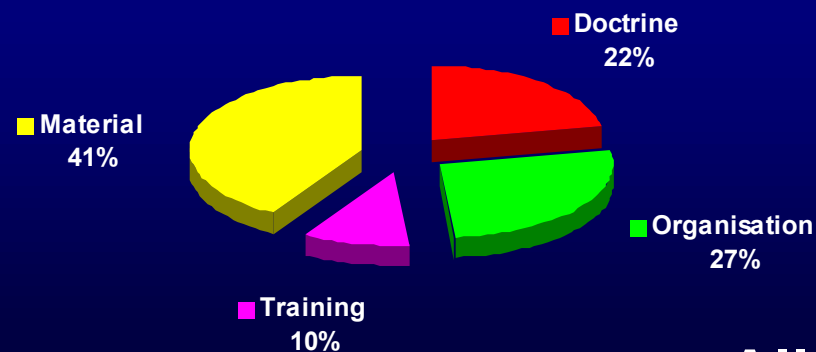
Doctrine

Organisation

Training

Materiel

**Investment across DOTM
is the solution**



All 42





- **Urban Operations will be a major component of future operations**
- **The influence of non-combatants on operations across the spectrum will remain a major feature**
- **The individual soldier will remain an essential element of urban operations.**
- **There are no easy solutions**

- **USECT provides an effective framework**
- **UNDERSTAND is the critical component**
- **Doctrine and Training solutions provide the greatest opportunity for short term improvements**
- **Materiel solutions will be realised from new technologies, most significantly in the mid to long term**



- 1** The operational concepts, capability requirements and potential solutions from this study should be expanded and further investigated, using the USECT framework; this should include urban concept development and experimentation
- 2** The findings of this study should be reflected in the NATO Defence Planning Process as Long Term Requirements
- 3** NATO should establish a Branch level lead within SHAPE to provide oversight as the focal point for future urban activities, and assign suitable POCs within NATO staffs for coordination, planning and operations



- 4** NATO should establish an Urban Operation Working Group to work to the nominated Branch to:
 - Serve as the focal point for coordination of all urban capability development activities, including further studies
 - Build a detailed plan for future activities utilising directions in UO 2020 study to:
 - Build upon national efforts to identify gaps and leverage opportunities
 - Provide initial focus on urban specific joint concept development & experimentation in urban C4ISTAR
- 5** RTB should endorse the study and recommendations, and forward them to the MC, CNAD and the Strategic Commands



Directions for future activities

Across DOTMLPF:

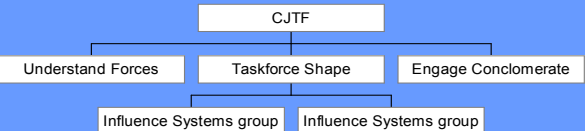
- Concept Development & Experimentation (C4ISTAR focus)
- Modelling & Simulation
- Policy
- Interoperability



Training Facilities

Allied Joint
Doctrinal
Publications

New Combined Joint Urban Taskforce



Any Questions?

Possible Solutions for 2020?